

## AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph starting at line 4 on page 14 as follows:

B<sup>1</sup> The friction stir welding performs solid state welding by pressing a rotation tool against a joining, using frictional heat generated in the rotation tool and the joining, pushing the rotation tool into the joining, and stirring materials through moving the rotation tool and generating a plastic flow. What becomes a problem here is that a resistance ~~forces~~ force generated when inserting or moving the rotation tool to the joining is about 10 kN or more. For this reason, the structure of the joining material that bears this force, and the restraint of the joining material itself are needed. In the case of a backing plate, depending on its geometry, it is comparatively easy to fix the body. However, it is comparatively difficult to fix the lid because the channel winds and has the complicated geometry.

Please amend the paragraph starting at line 24 on page 21 as follows:

B<sup>2</sup> The dimensions of the body 1 are 1500 L × 1200 W × 15 D mm. In the case of this Fig. 1, there are five channels 4 for cooling. If ~~being~~ the dimensions are 1300 L × 900 W × 15 D mm, similarly, four U-channels 4 are provided. In this embodiment, there are three channels 4 per one meter long. Each channel 4 has an independent closed path, and an entrance and an exit for a coolant are provided in both ends of each channel 4 respectively, and are used after joining. I-shape and S-shape

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channels are the same as the U-shape channel. An air vent is provided in an end section of the lid 2 (not shown). The installation and joining of the lid 2 become easy by providing the air vent.

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Please amend the paragraph starting at line 20 on page 22 as follows:

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B<sub>3</sub>  
Fig. 2 is a sectional view near a channel of a backing plate. A first groove that becomes the channel 4 whose cross section is rectangular is provided inside the body 1 by machining, a second groove that has a cross-sectional space larger than the channel 4 and has a step is formed on the first groove, and the lid 2 is fit in a part of the second groove. At this time, the body 1 and lid 2 have socket and spigot structure, and overlapping width 5 is about 2.5 mm. In addition, the width and height of the channel 3 4 are about 50 mm and 5 mm respectively, and further, the height of the lid 2 is 5 mm. Hence, when the lid 2 is fit into the body 1, both become the same height. Since these shapes or dimensions change according to types of backing plates, a planar shape of the body 1 also has a round shape besides a square shape in this way. Therefore, a penetration bead of a joining does not go into the channel 6 4, and hence, normal joining is obtained. Since a ~~bend~~ warp arose in the joining side of this backing plate after joining, the ~~bend~~ warp was corrected by press formation with a punch having an I-shaped edge, and thereafter, cutting and grinding were performed.

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